April 11, 1944. B. T. HOFFMASTER ET AL 2,346,488

DISPENSING PACKAGE

Filed Oct. 22, 1943 2 Sheets-Sheet 1

Fig. 1.

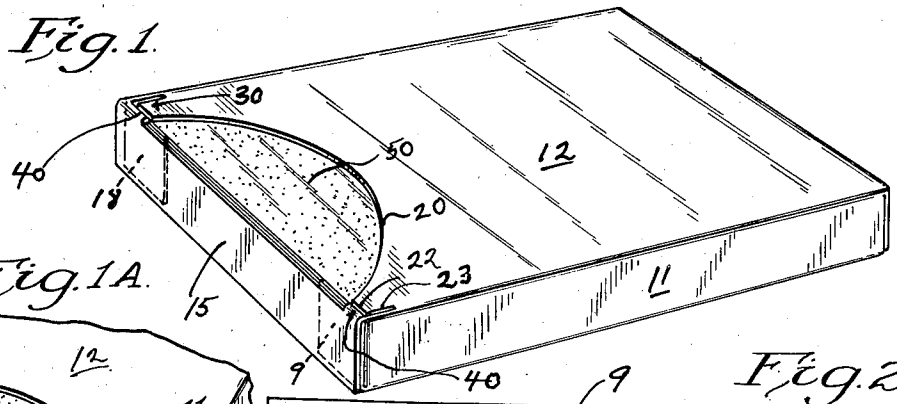


Fig. 1A.

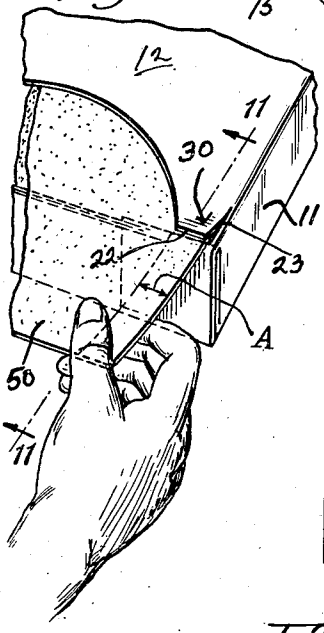


Fig. 2.

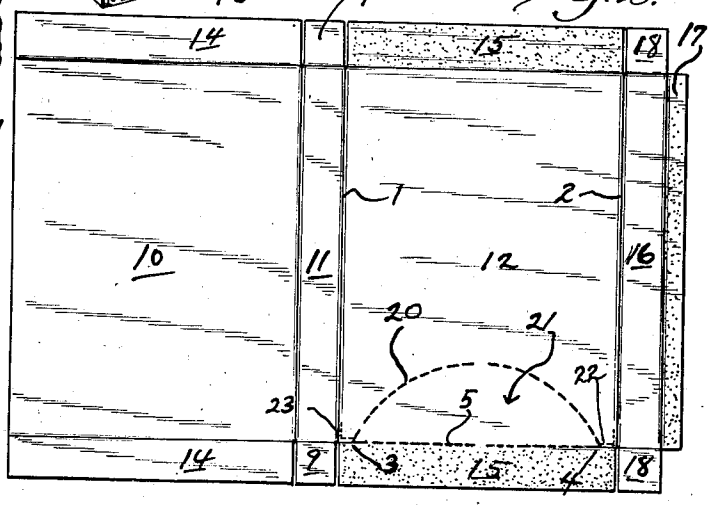


Fig. 3.

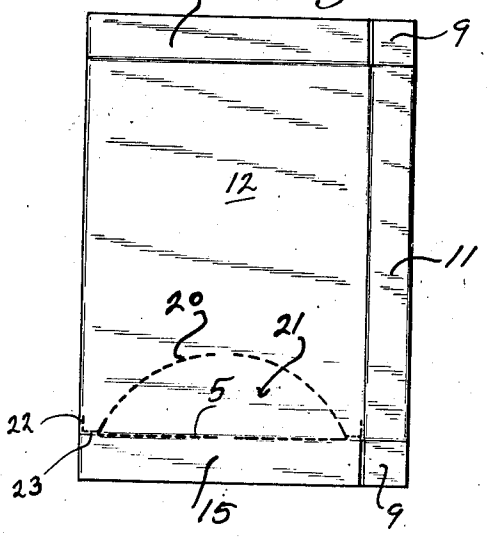
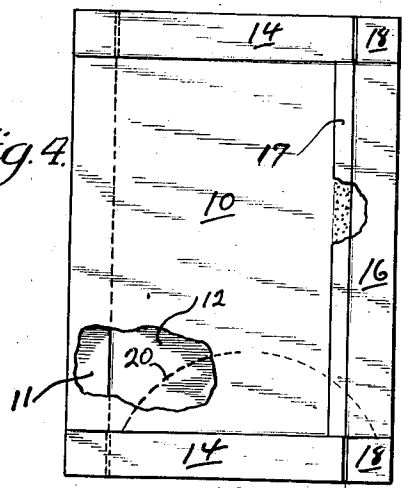


Fig. 4.



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Fig. 6.

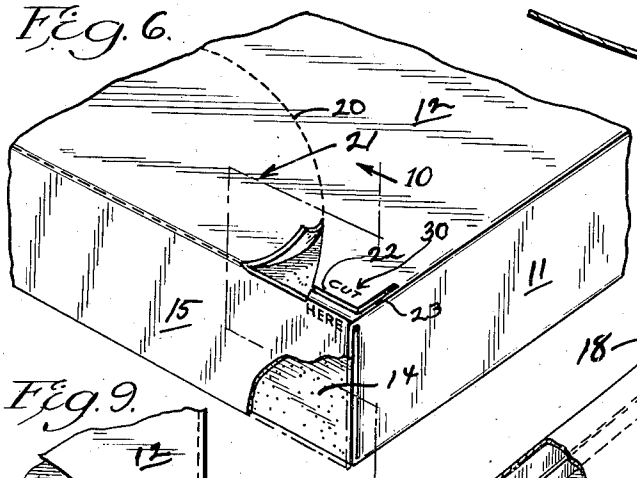


Fig. 11.

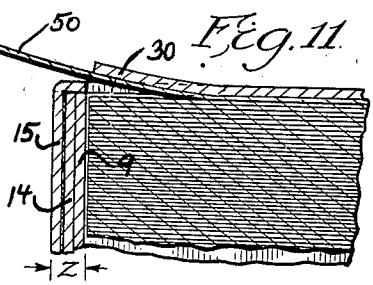
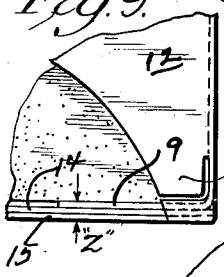


Fig. 9.



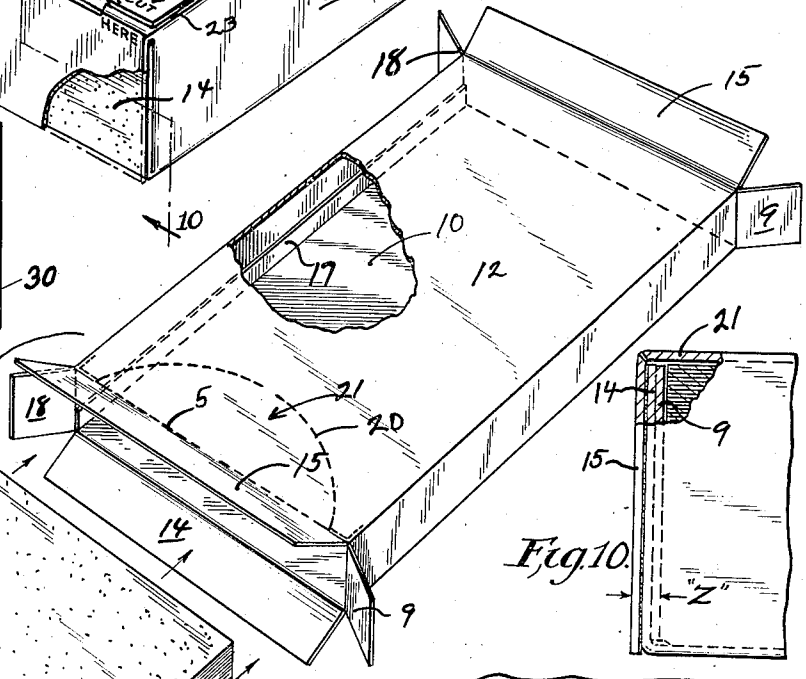


Fig. 5.

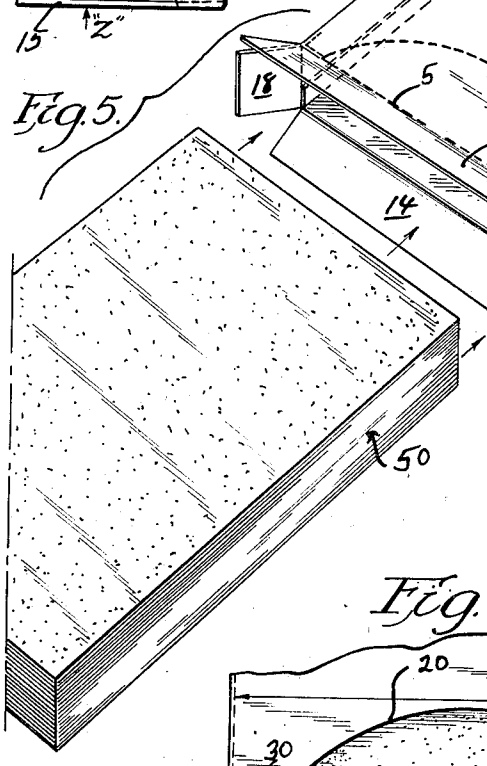


Fig. 10.

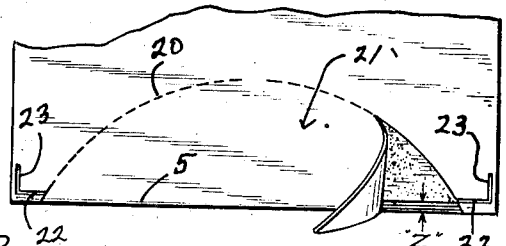


Fig. 8.

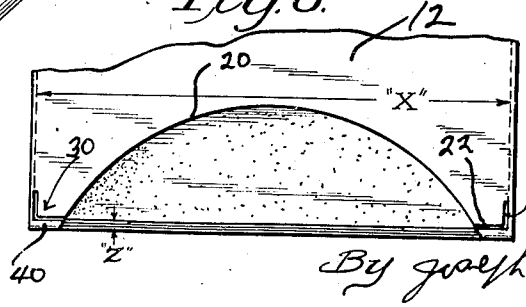


Fig. 7.

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UNITED STATES PATENT OFFICE

2,346,488

DISPENSING PACKAGE

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Application October 22, 1943, Serial No. 507,316

5 Claims. (Cl. 206—57)

This invention relates to a package comprising a stack of rectangular sheets retained in a dispensing carton for dispensing individual sheets therefrom, one at a time, without disturbing the remainder of the stack of sheets within the package.

Hitherto many types of carton constructions have been suggested for dispensing sheets therefrom, but these have not been fully satisfactory, particularly in the case of sheets of waxed paper, as the sheets tend to cling to each other when withdrawn so that more than one sheet at a time is withdrawn from the package.

In prior constructions the side edges of the sheets also tend to be crumpled or torn when withdrawn owing to inadequate construction of the dispensing openings provided in such cartons.

These disadvantages have been fully overcome by the present invention whereby a strong and sturdy package is provided using a container which serves both as a shipping container and as an efficient dispensing receptacle. The contents of the package are protected against contamination by entry of dirt or dust until the consumer is ready to use the package.

Further advantages and novel features of the present invention will be apparent from the following specification and appended drawings illustrating a specific exemplary embodiment of our invention.

In the drawings:

Figure 1 is a perspective view of a package made according to the present invention provided with a dispensing opening for removing the sheets one at a time therefrom.

Figure 1A is a fragmental perspective view of the package illustrating withdrawal of a single sheet therefrom,

Figure 2 is a plan view of a rectangular blank suitably cut and scored to form the package illustrated in Figure 1,

Figure 3 is a plan view of the blank in flat folded condition during the gluing operation,

Figure 4 is a plan view of the rear of the folded and glued blank in flat condition,

Figure 5 is an exploded perspective view showing a stack of sheets about to be placed in the carton formed from the blank shown in Figure 2.

Figure 6 is a fragmental perspective view of the package showing the initial stage in removing the tear-out segment to form a dispensing opening,

Figure 7 is a fragmental plan view of the package showing the initial step in removing the tear-out segment,

Figure 8 is a view similar to Figure 7 showing the tear-out segment fully removed,

Figure 9 is an enlarged fragmental plan view of the package with the tear-out segment fully removed,

Figure 10 is a sectional view taken on lines 10—10 of Figure 6, and

Figure 11 is an enlarged fragmental sectional view taken on lines 11—11 of Figure 1A.

Referring to the drawings, the package made according to the present invention comprises a stack of rectangular sheets 50 retained in a dispensing carton shown in Figure 1. The carton is formed from a single blank, shown in Figure 2 as an illustrative embodiment, suitably cut, scored and glued. A removable tear-out segment 21 is provided in the front panel 12 of the carton which when removed provides a dispensing opening as illustrated in Figure 1, for removal of individual sheets one at a time from the package as shown in Figure 1A.

The blank shown in Figure 2 is preferably made of cardboard of suitable thickness and dimensions and is suitably cut and scored to provide a front panel 12, rear panel 10, side panels 11 and 16, end panels 14 and 15, and a glue panel 17. End flaps 9 are also provided which are articulated to side panel 11. End flaps 18 are articulated to side panel 16. In forming the carton this blank is folded as illustrated in Figures 3 and 4 so that glue panel 17 overlaps the free edge of rear panel 10 and is adhered thereto by any suitable adhesive. A stack of sheets 50 is introduced within the set-up carton as shown in Figure 5 by introducing the stack through the lower open end of the carton. End flaps 9 and 18 are then folded inwardly. Panel 14 is then folded over the end of the carton and panel 15 is folded over panel 14 and glued thereto. Similarly the upper end of the carton is sealed by folding over flaps 9 and 18 and then overlapping and gluing upper end panels 14 and 15.

The front panel 12 is provided with a tear-out segment 21 which is demarcated by a line of weakening 5 coinciding with the lower edge of panel 12. The line of weakening may be formed in any suitable manner such as by a series of perforations, spaced cuts or indentions to facilitate tearing along said line. The ends 3 and 4 of the weakened line 5 terminate a relatively short distance from the adjacent longitudinal edges 1 and 2, respectively, of the front panel.

Relatively short cut score horizontal lines 23 extend from each end 3 and 4 of weakened line 5 to the longitudinal edges 1 and 2, as shown in Figures 1 and 2. The cut score lines 23 preferably extend entirely through the blank and are continuous throughout their length, but if desired lines of weakening or printing may indicate their location which may be cut with a knife by the user of the package. Cut score lines 22 are advantageously slightly offset upwardly in relation to line 5 as shown in Figures 1, 2, 6 and 7 for a purpose to be explained later. Longitudinal cut score lines 23 are provided at the lower ends of longitudinal edges 1 and 2 of the front panel so as to intersect cut score lines 22. Cut score lines 22 and 23 thus form small yieldable corner flaps, indicated by numeral 30, at each of the lower bottom corners of the front panel. A continuous arcuate line of weakening 20 extends upwardly from the ends 3 and 4 of weakened line 5 so as to demarcate a tear-out segment 21. Any other suitable contour may be used for line 20 for providing a suitable dispensing opening. As shown in Figures 6 and 7, segment 21 is adapted to be torn out along weakened lines 5 and 20 so as to provide a dispensing opening as shown in Figures 1 and 8.

As previously stated, a package made according to the present invention is particularly adapted for dispensing a stack 50 of sheets of waxed paper. The sheets are fully protected in the carton against contamination and damage during shipment and storage until they are to be used. The carton can then be used for dispensing one sheet at a time therefrom while leaving the remainder of the stack undisturbed within the carton. When a sheet 50 is withdrawn through the dispensing opening as shown in Figure 1A and Figure 11, the lower corner flaps 30 will resiliently contact the marginal portions A of the sheet as it is being withdrawn without wrinkling or tearing the margins A of the sheet. At the same time the lower front wall 9 of the carton will contact the lower edges of the stack of sheets as shown in Figure 11 and prevent withdrawal of any sheets within the package except the foremost sheet being withdrawn. By virtue of cut score lines 22 being offset in relation to weakened line 5, flange portions 40 are provided at each of the lower corners of the front panel adjacent each of the longitudinal edges thereof. These flange portions serve to retain the sheet succeeding the foremost sheet and thus prevent it from being withdrawn if any slight sticking of the sheets should occur, especially when they are waxed or otherwise coated.

The present construction thus provides a very effective dispensing package for withdrawing waxed paper sheets, and the like, one at a time without wrinkling or tearing the sheets and without withdrawing more than one sheet at a time.

Having fully disclosed the essential and significant features of our invention, we intend to include any modifications and departures embodying our novel features within the scope of the appended claims.

We claim:

1. A package comprising a stack of rectangular sheets retained in a dispensing carton comprising a blank cut, scored and folded to form a rectangular front and rear panel, upper and lower end walls and side walls, the dimensions of said front and rear panels being substantially equal to the dimensions of said sheets, the front panel being provided with a line of weakening coinciding with the lower edge of said front panel and terminating relatively short of each of the longitudinal edges of said front panel, horizontal cut score lines extending from each end of said line of weakening to each of the adjacent longitudinal edges of said front panel, relatively short cut score lines extending along the ends of each of the said longitudinal edges of said front panel and intersecting said horizontal cut score lines to provide yieldable flaps at each of the lower corners of said front panel, and a continuous line of weakening extending upwardly from each of the inner ends of said horizontal cut score lines to provide a tear out segment, said segment being adapted to be torn out from said front panel to provide a dispensing opening for removal of said individual sheets from the package without tearing or crumpling the longitudinal edges of said sheets and said lower end wall retaining the lower edge of the remaining stack of sheets within the package.

2. A package comprising a stack of rectangular sheets retained in a dispensing carton comprising a blank cut, scored and folded to form a rectangular front and rear panel, upper and lower end walls and side walls, the dimensions of said front and rear panels being substantially equal to the dimensions of said sheets, the front panel being provided with a line of weakening coinciding with the lower edge of said front panel and terminating relatively short of each of the longitudinal edges of said front panel, horizontal cut score lines extending in offset relation from each end of said line of weakening to each of the adjacent longitudinal edges of said front panel, relatively short cut score lines extending along the ends of each of the said longitudinal edges of said front panel and intersecting said horizontal cut score lines to provide yieldable corner flaps at each of the lower corners of said front panel, and a continuous line of weakening extending upwardly from each of the inner ends of said horizontal cut score lines to provide a tear out segment, said segment being adapted to be torn out from said front panel to provide a dispensing opening for removal of said individual sheets from the package without tearing or crumpling the longitudinal edges of said sheets and said lower end wall retaining the lower edge of the remaining stack of sheets within the package.

3. A package comprising a stack of rectangular sheets retained in a dispensing carton comprising a blank cut, scored and folded to form a rectangular front and rear panel, upper and lower end walls and side walls, the dimensions of said front and rear panels being substantially equal to the dimensions of said sheets, the front panel being provided with a line of weakening coinciding with the lower edge of said front panel and terminating relatively short of each of the longitudinal edges of said front panel, horizontal cut score lines extending in offset relation from each end of said line of weakening to each of the adjacent longitudinal edges of said front panel, relatively short cut score lines extending along the ends of each of the said longitudinal edges of said front panel and intersecting said horizontal cut score lines to provide at each of the lower corners of said front panel yieldable flaps and flange portions for contacting the longitudinal margins of said sheets when withdrawn from the package, and a continuous line of weakening extending upwardly from each of the inner ends of said horizontal cut score lines to provide a

tear out segment, said segment being adapted to be torn out from said front panel to provide a dispensing opening for removal of said individual sheets from the package without tearing or crumpling the longitudinal edges of said sheets and said lower end wall and flange portions retaining the remaining stack of sheets within the package.

4. A package comprising a stack of rectangular sheets retained in a dispensing carton comprising a blank cut, scored and folded to form a rectangular front and rear panel, upper and lower end walls and side walls, the dimensions of said front and rear panels being substantially equal to the dimensions of said sheets, the front panel being provided with a line of weakening coinciding with the lower edge of said front panel and terminating relatively short of each of the longitudinal edges of said front panel, horizontal cut score lines extending in offset relation from each end of said line of weakening to each of the adjacent longitudinal edges of said front panel, relatively short cut score lines extending along the ends of each of the said longitudinal edges of said front panel and intersecting said horizontal cut score lines to provide at each of the lower corners of said front panel yieldable flaps and flap portions, and a continuous arcuate line of weakening extending upwardly from each of the inner ends of said horizontal cut score lines to provide a tear-out segment, said segment being adapted to be torn out from said front panel to provide a dispensing opening for removal of said individual sheets from the package without tearing or crumpling the longitudinal edges of said sheets and said lower end wall retaining the lower edge of the remaining stack of sheets within the package.

5. A package comprising a stack of rectangular sheets retained in a dispensing carton comprising a blank cut, scored and folded to form a rectangular front and rear panel, upper and lower end walls and side walls, the dimensions of said front and rear panels being substantially equal to the dimensions of said sheets, the front panel being provided with a line of weakening coinciding with the lower edge of said front panel and terminating relatively short of each of the longitudinal edges of said front panel, horizontal guide lines extending in offset relation from each end of said line of weakening to each of the adjacent longitudinal edges of said front panel, relatively short guide lines extending along the ends of each of the said longitudinal edges of said front panel and intersecting said horizontal guide lines to provide when cut at each of the lower corners of said front panel yieldable flaps and flange portions for contacting the longitudinal margins of said sheets when withdrawn from the package, and a continuous line of weakening extending upwardly from each of the inner ends of said horizontal cut guide lines to provide a tear-out segment, said segment being adapted to be torn out from said front panel to provide a dispensing opening for removal of said individual sheets from the package without tearing or crumpling the longitudinal edges of said sheets and said lower end wall and flange portions retaining the remaining stack of sheets within the package.

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